NJ - Neonatal Jaundice

NJ-C COMPLICATIONS

OUTCOME: The family will understand the common or serious complications of neonatal jaundice.

STANDARDS:

1. Explain that the most common complication of neonatal jaundice is lethargy resulting in decreased feeding followed by increased dehydration and worsening jaundice.
2. Explain that the most serious complication of neonatal jaundice is acute bilirubin encephalopathy and kernicterus.
3. Emphasize the importance of watching for jaundice and seeking medical care if jaundice is noticed to prevent complications.
4. Discuss complications associate with treatment of neonatal jaundice:
    a. Eye damage from phototherapy lights
    b. Dehydration
    c. Blood born pathogens from exchange transfusions
    d. Bonding process delays
    e. Breastfeeding complications

NJ-DP DISEASE PROCESS

OUTCOME: The family will understand the basic pathophysiology of neonatal jaundice.

STANDARDS:

1. Explain that over ½ of newborns develop some degree of jaundice.
2. Explain that neonatal jaundice is characterized by yellow discoloration of the skin and in some cases the whites of the eyes.
3. Explain that the yellow discoloration is caused by a chemical in the blood called bilirubin which is a breakdown product of red blood cells.
4. Discuss that everyone is breaking down red blood cells and producing new ones constantly.
5. Explain that in-utero the bilirubin is broken down by the mother's liver but the most common reason for neonatal jaundice is immaturity of the newborn's liver enzymes that are unable to break down the bilirubin fast enough to prevent jaundice.

6. Discuss other less common reasons for jaundice as appropriate:
    a. Maternal antibodies against the newborn's blood resulting in hemolysis
    b. Extensive bruising or cephalohematoma secondary to the birth process
    c. Dehydration or excessive weight loss after birth
    d. Prematurity
    e. G6PD deficiency resulting in hemolysis
    f. Other hemolytic processes
7. Explain, as appropriate, that some individuals are at higher for development of jaundice:
    a. Persons whose sibling required phototherapy
    b. Infants less than 38 weeks gestation
    c. Breastfed infants, especially when there is difficulty initiating breastfeeding
    d. Macrosomic infants of gestational diabetic mothers
    e. Infants with significant weight loss
    f. Infants born to mothers >25 years of age
    g. Male infants

NJ-P PREVENTION

OUTCOME: The family will understand the measures that may prevent jaundice or complications from jaundice.

STANDARDS:

1. Explain that breastfeeding 8–12 times per day will help to prevent jaundice or significant complications from jaundice.
2. Emphasize the importance of watching for jaundice and seeking medical care if jaundice is noticed to prevent complications.
3. Emphasize that the evaluation of blood bilirubin levels as soon as jaundice is identified can help reduce complications by initiating therapy when indicated.
4. Explain that interventions such as medical phototherapy or exchange transfusions can decrease the incidence of complications such as acute bilirubin encephalopathy and kernicterus.

NJ-TE TESTS

OUTCOME: The family will understand the test(s) to be performed including indications and its impact on further care.

STANDARDS:

1. Explain that there are two ways to test for bilirubin levels:
   a. Blood bilirubin levels (more accurate)
   b. Transcutaneous bilirubinometer
2. Emphasize that visual estimation of bilirubin levels leads to errors.
3. Explain that numerous blood draw may be necessary as following levels bilirubin levels and other lab tests closely is necessary to avoid complications.

NJ-TX TREATMENT

OUTCOME: The family will understand the treatment plan.

STANDARDS:

1. Discuss that exposing the infants to sunlight is no longer recommended to lower bilirubin levels due to the risks of exposure.
2. Explain that medical phototherapy lowers bilirubin levels by breaking down bilirubin through the skin.
3. Explain that exchange transfusion may be necessary for dangerously high bilirubin levels or if acute bilirubin encephalopathy is identified.